

# Notice of Allowability

Application No.

09/628,692

Examiner

Carl Colin

Applicant(s)

SIBERT, W. OLIN

Art Unit

2136

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed on 12/18/2006 and interview held on 3/2/2007.
2. ☒ The allowed claim(s) is/are 7-13 and 28-47.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20070227 .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

NASSER MOAZZAMI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

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## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/18/2006 has been entered.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael J Meehan on March 2, 2007.

The application has been amended as follows:

Claim 28: (Currently amended) In an electronic appliance including a secure execution space and an insecure execution space, a method for permitting an application executing within the insecure execution space to request one or more services from a trusted element executing in the secure execution space, the method comprising:

- (a) issuing a challenge from the trusted element to the application or an agent of the application **executing within the insecure execution space**, the challenge being based at least in part on randomly selected parts of an authenticated credential, the challenge requesting the application or agent to provide one or more cryptographic hashes of one or more portions of the application, the one or more portions of the application including at least some executable software code;
- (b) sending, from the application or agent to the trusted element, said one

Art Unit: 2136

or more cryptographic hashes of one or more portions of the application;  
(c) comparing, at the trusted element, information provided by the authenticated credential with said one or more cryptographic hashes of one or more portions of the application; **[[and]]**  
(d) denying the application access to said one or more services if the comparison fails **[[.]] ; and**  
**(e) allowing the application access to said one or more services if the comparison succeeds.**

Claim 35. (Currently amended) A computer readable medium storing a computer program, the computer program including instructions that, when executed by a processor of an electronic appliance, are operable to cause the electronic appliance to take actions comprising:

(a) issuing a challenge from a trusted element executing in a secure execution space to an application or agent executing in an insecure execution space, the challenge being based at least in part on randomly selected parts of an authenticated credential, the challenge requesting the application or agent to provide one or more cryptographic hashes of one or more portions of the application, the one or more portions of the application including at least some executable software code;  
(b) receiving, from the application or agent, said one or more cryptographic hashes of one or more portions of the application;  
(c) comparing information provided by the authenticated credential with said one or more cryptographic hashes of one or more portions of the application;  
**[[and]]**  
(d) denying the application access to one or more services provided by an application executing in the secure execution space if the comparison fails**[[.]]; and**  
**(e) allowing the application access to one or more services provided by an application executing in the secure execution space if the comparison succeeds.**

Claim 42. (Currently amended) An electronic appliance comprising:  
a secure execution space;  
an insecure execution space; and  
a trusted element operable to execute within the secure execution space, the trusted element being operable to:  
(a) issue a challenge to an application or agent executing in the insecure execution space, the challenge being based at least in part on randomly selected parts of an authenticated credential, the challenge requesting the application or agent to provide one or more cryptographic hashes of one or more portions of the application, the one or more portions of the application including at least some executable software code;

Art Unit: 2136

- (b) receive, from the application or agent, said one or more cryptographic hashes of one or more portions of the application;
- (c) compare information provided by the authenticated credential with said one or more cryptographic hashes of one or more portions of the application;  
**[[and]]**
- (d) deny the application access to one or more services provided by an application executing in the secure execution space if the comparison fails**[[.]]; and**
- (e) allow the application access to one or more services provided by an application executing in the secure execution space if the comparison succeeds.**

### *Response to Arguments*

3. In response to communications filed on 12/18/2006, applicant amends claims 7, 28, 35, and 42. The following claims 7-13 and 28-47 are pending. Applicant's arguments pages 9-16, filed on 12/18/2006 with respect to the prior art rejection of the claims have been fully considered and they are persuasive as amended.

### *Reasons for Allowance*

4. The following is an examiner's statement of reasons for allowance: the prior art of record, US Patent 6,047,242 to Benson teaches a method for protecting an item of software wherein at least one first challenge means is associated with said protected item of software, and at least one first response means accesses one private keying material. The prior art of record US Patent 6,009,543 to Shavit teaches a secure software system including a transformation processor for transforming an original program capable of being executed on a lessee site into a vendor server program, a first program intended to be executed at the lessee site which lacks some of the functionality of the original program and a second program. The first program requires cooperation with the second program which corresponds to an excised portion of the original

Art Unit: 2136

program to provide the functionality of the original program. The prior arts of record, fail to teach singly or in combination *“a challenge generator that selects, based at least in part on the credential, at least one predetermined portion of the application, the predetermined portion of the application including at least some executable code, and issues a challenge requesting a response from the insecure arrangement, the response providing a computation of at least one value based on the selected predetermined portion of the application”* as recited in claim 7. Consequently claim 7 is allowable over the prior arts of record.

The prior arts of record, also fail to teach singly or in combination *“issuing a challenge from the trusted element to an application or an agent of the application executing within the insecure execution space, the challenge being based at least in part on randomly selected parts of an authenticated credential, the challenge requesting the application or agent to provide one or more cryptographic hashes of one or more portions of the application the one or more portions of the application including at least some executable code”* as recited in claim 28.

Claims 35 and 42 recite similar limitations. Consequently claims 28, 35, and 42 are allowable over the prior arts of record. Dependent claims 8-13, 29-34, 36-41, 43-47 are directly or indirectly dependent upon claims 7, 28, 35, and 42 and therefore are allowable over the prior arts of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Art Unit: 2136

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cc

Carl Colin  
Patent Examiner  
March 2, 2007

NASSER MOAZZAMI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

  
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